

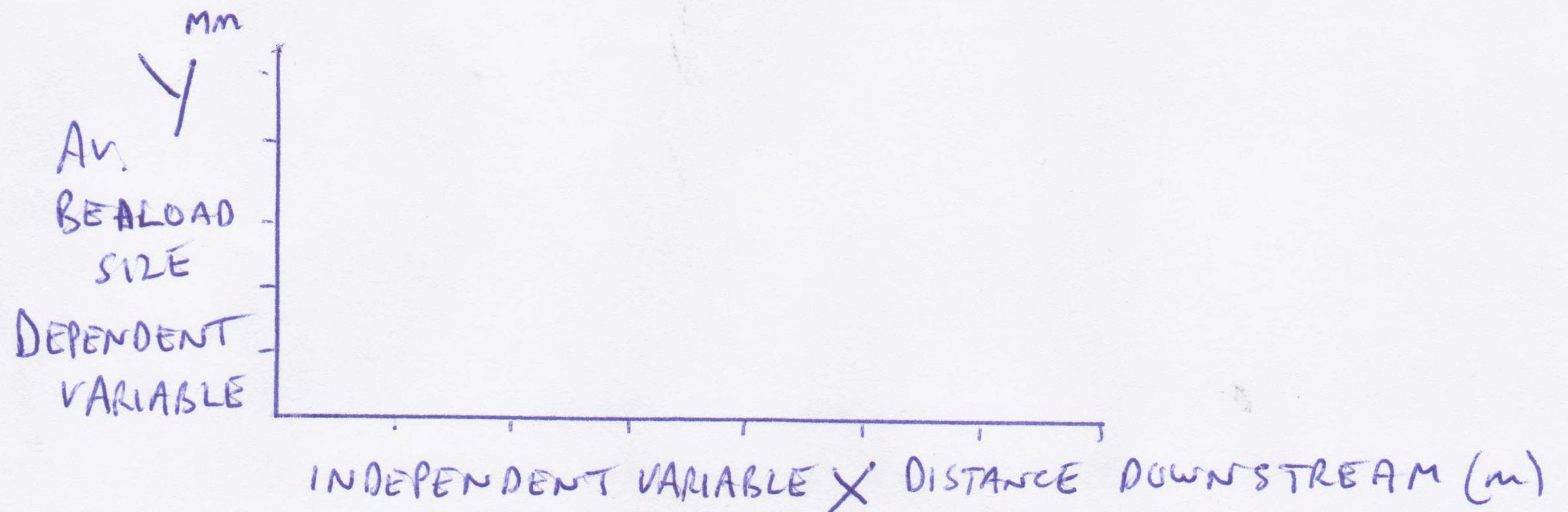
PRESENTATION OF THE GEOGRAPHICAL DATA

DESCRIBE AND JUSTIFY

An excellent way to present and illustrate downstream changes in the character of a river, its channel, flow and bedload is a SCATTERGRAPH.

This is a way of comparing two variables, for instance distance downstream and the size of the bedload or distance downstream and the hydraulic radius. It is important that you can assume that the relationship between the two variables is CAUSAL and that the INDEPENDENT VARIABLE (the one that makes the other one change is plotted on the X axis. The DEPENDENT VARIABLE (the one that is caused to change) is plotted on the Y axis.

In this case distance downstream is plotted on the X axis and other variable such as bedload size, hydraulic radius, velocity etc. are plotted on the y axis.



The scatter of points on the graph illustrates the type of relationship that might exist between the two variables. We might expect a POSITIVE RELATIONSHIP in the case of channel size or hydraulic radius as they both should increase in a downstream direction, but bedload size should give a NEGATIVE RELATIONSHIP as it decreases in as downstream direction. The pattern of points may indeed illustrate that there is NO RELATIONSHIP between the two variables is the points on the graph appear to be randomly scattered and show no obvious pattern. But showing that no relationship appears to exist is a valid use of the graph.

